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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/089,795

04/23/2002

Naomi Noda

WATK:233

1091

7590

03/08/2004

Parkhurst & Wendel
1421 Prince Street Suite 210
Alexandria, VA 22314-2805

EXAMINER

GREENE, JASON M

ART UNIT

PAPER NUMBER

1724

DATE MAILED: 03/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/089,795

Applicant(s)

NODA ET AL.

Examiner

Jason M. Greene

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-14 and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 2, 4-14, 19, and 20 is/are allowed.
- 6) ☒ Claim(s) 16-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. The Examiner notes that, while the Office apparently received a copy of the priority document from the International Bureau, the copy of the priority document is not in the application file. While Applicants are under no obligation to do so, the Examiner suggests Applicants a file photocopy of the certified copy of the priority document with the next response as this should expedite prosecution of the application for all concerned.

Response to Amendment

Response to Arguments

2. Applicant's arguments, see page 11, line 11 to page 12, line 9, filed 17 December 2003, with respect to the 35 USC 112, first paragraph rejection of claim 10 have been fully considered and are persuasive. The 35 USC 112, first paragraph rejection of claim 10 has been withdrawn. Additionally, the Examiner agrees that the correction to the units does not constitute new matter since of one ordinary skill would recognize that the new units (i.e. g/l) are those customarily used in the art.

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3. Applicant's arguments, see page 12, line 11 to page 15, line 7, filed 17 December 2003, with respect to the 35 USC 103 rejections of claims 1-15 have been fully considered and are persuasive. The 35 USC 103 rejections of claims 1-15 have been withdrawn.

4. Applicant's arguments regarding claims 16-18 filed 17 December 2003 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the heat-resistant ceramic particles having an average particle diameter of 2 to 20 μm) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In page 15, lines 12-13, Applicants argue that the applied references fail to suggest the product of claim 1 and a method of making it. As noted above, the Examiner agrees that the prior art of record does not fairly suggest the product of claim 1. However, the method of making claims do not include a recitation of the specific average diameters of the heat-resistant particles being 2 to 20 μm . As pointed out by Applicants, the two primary references are directed to a catalyst support coating and do not provide any motivation for utilizing heat resistant particles having a BET specific surface area and average diameter within the instantly claimed ranges. However, since the method of making claims fail to recite the specific particle diameters which

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distinguish the product claims over the prior art, claims 16-18 are rejected for the same reasons as in the previous Office action.

The Examiner notes that adding a limitation reciting the heat resistant ceramic particles having an average particle diameter of 2 to 20 μm to claim 16 would distinguish claims 16-18 over the prior art of record.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Published patent Application JP 9-220423 in view of European Published Patent Application EP 0 701 859 A1 and Watanabe et al.

With regard to claims 16 and 17, JP 9-220423 discloses a process for producing a ceramic-made filter which comprises coating on the surface of a filter material made of a porous ceramic, a slurry containing at least heat-resistant ceramic particles and a binder at proportions satisfying the recited formulas to form a ceramic particulate layer in Figs. 1 and 3 and paragraphs [0008] to [0021] of the English language translation.

JP 9-220423 discloses the slurry containing 670g of the heat-resistant ceramic particles and 330g of a binder, wherein the binder is alumina-sol produced by Nissan

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Chemistry in paragraph [0020] of the English language translation. While JP 9-220423 is silent as to the composition of the alumina-sol, Watanabe et al. discloses alumina-sol produced by Nissan Chemistry having an alumina content of 10 weight percent in col. 5, lines 60-67. Since the alumina-sol comprises 10 weight percent alumina, the amount of binder solid (calculated as oxide) can be calculated to be $0.10 \times 330\text{g} = 33\text{g}$. Substituting this value into the recited equations yields $33\text{g} / (670\text{g} + 33\text{g}) = 0.047$. Therefore, since $0.25 \geq 0.047 \geq 0.02$, the recited formulas are seen as being satisfied. The Examiner notes that the Watanabe et al. reference has been cited merely to establish the physical characteristics of the alumina-sol of JP 9-220423.

JP 9-220423 does not disclose the heat-resistant ceramic particles having a BET specific surface area of $300 \text{ m}^2/\text{g}$ or less.

EP 0 701 859 A1 discloses a catalyst carrier having a ceramic particles layer made of heat-resistant ceramic particles having a BET specific surface area of $50 \text{ m}^2/\text{g}$ in page 3, lines 15-58.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the BET specific surface area of the ceramic particles of EP 0 701 859 A1 into the ceramic particles of JP 9-220423 to provide ceramic particles having an amply large surface area and an ability to disperse the metallic catalyst to a certain extent but not to an unduly high extent, as suggested by EP 0 701 859 A1 in page 3, lines 49-54.

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With regard to claim 18, JP 9-220423 teaches the binder being free of alkali metal in paragraph [0020] of the English language translation. Since JP 9-220423 teaches the binder being free of alkali metal, JP 9-220423 is seen as teaching the binder containing alkali metal in amount of 5 percent by weight or less in terms of oxide, relative to the binder solid in terms of oxide.

Allowable Subject Matter

7. Claims 1, 2, 4-14, 19, and 20 are allowed.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Greene whose telephone number is (571) 272-1157. The examiner can normally be reached on Monday - Friday (9:00 AM to 5:30 PM).

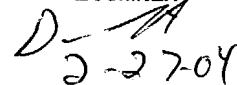
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason M. Greene
Examiner
Art Unit 1724



DUANE SMITH
PRIMARY EXAMINER


2-27-04

jmg
February 26, 2004